

CLAIMS

1. A magnetic tape comprising a substrate having on one side thereof a magnetic layer serving as a recording surface and on the other side thereof a resin layer serving as a non-recording surface, wherein said magnetic tape has a region on the side of the non-recording surface along the longitudinal direction of the tape in which a regular pattern for servo tracking having different optical properties from the other major region of the side of the non-recording surface is to be formed, and said magnetic tape has a thickness of 7 μm or less.

2. The magnetic tape according to claim 1, wherein said optical properties are a reflectance or a transmission of light, and the difference between said pattern and the other major region of the non-recording surface in reflectance or transmission of light having a prescribed wavelength used for servo tracking is 10% or more.

3. The magnetic tape according to claim 1, wherein said magnetic tape has on the side of the non-recording surface a layer containing a coloring matter and capable of optically recording servo signals for tracking.

4. The magnetic tape according to claim 2, wherein said layer containing a coloring matter has been irradiated with light having a prescribed wavelength from the side of the non-recording surface to change the color of said coloring matter thereby to form a color-changed pattern of prescribed shape providing servo signals for tracking.

5. The magnetic tape according to claim 1, wherein said magnetic tape has a coefficient of dynamic friction of 0.15 to 0.35 on the non-recording surface thereof.

6. The magnetic tape according to claim 3, wherein said magnetic tape further comprises a backcoating layer serving as an outermost layer contains a binder

Sub AG and inorganic powder and is located on said layer containing a coloring matter.

7. The magnetic tape according to claim 4, wherein said magnetic tape further comprises a metallic thin layer located between said substrate and said layer containing a coloring matter so that said servo signals are to be read by irradiating said color-changed pattern with light having a prescribed wavelength from the side of the non-recording surface and then detecting the intensity of light reflected on said metallic thin layer.

8. The magnetic tape according to claim 1, wherein said magnetic tape further comprises a thin layer of a metal or an alloy having a low melting point which is located between said substrate and said resin layer, and a servo tracking pattern comprising depressions is formed in said thin layer.

9. The magnetic tape according to claim 8, wherein said servo tracking pattern has a width of 0.1 to 30 μm and a depth of from 1/3 of the thickness of said thin layer up to the whole thickness of said thin layer.

Sub AG 10. A magnetic tape comprising a substrate having on one side thereof a magnetic layer serving as a recording surface and on the other side thereof a resin layer serving as a non-recording surface, wherein said magnetic tape has a regular pattern for servo tracking on the side of the non-recording surface along the longitudinal direction of the tape which has different optical properties from the other major region of the side of the non-recording surface, and said magnetic tape has a thickness of 7 μm or less.

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